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| 10/645,903 | 08/22/2003 | Motoyuki Fujimori | 116920 | 8525 |
| 25944 | 7590 | 08/24/2004 | EXAMINER | |
| OLIFF & BERRIDGE, PLC P.O. BOX 19928 ALEXANDRIA, VA 22320 | | | MARTINEZ, JOSEPH P | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2873 | |
| DATE MAILED: 08/24/2004 | | | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/645,903

Applicant(s)

FUJIMORI ET AL.

Examiner

Joseph P. Martinez

Art Unit

2873

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,3-9 and 26 is/are rejected.
- 7) ☒ Claim(s) 2,10-25 and 27 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. ____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 1-6-04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Specification

The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 3, the phrase "and/or" renders the claim(s) indefinite because the claimed combination or lack of combination of limitations following the phrase is not clear, thereby rendering the scope of the claim(s) unascertainable. See MPEP § 2173.05(d).

Claims 4-9 are further rejected due to being dependent upon claim 3.

For purposes of examination, the office interprets claim 3 on lines 20-21 to read -- a light-incident side or the light-irradiation side of the optical modulator body or a light-incident side and the light-irradiation side of the optical modulator body, --.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3, 4, 7 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okada et al. (US2002/0089612) in view of Fujimori (6392780).

Re claim 1, Okada et al. teaches for example in figs. 1A and 5A-5C, an optical modulator that modulates a light beam (paras. 0029-0030) irradiated by a light source (1) in accordance with image information comprising: an optical modulator body (22) and a holding frame that houses the optical modulator body therein (para. 0034), the holding frame having an approximately C-shaped cross section (fig. 50a, wherein the office interprets the integral 22 with 50a to be approximately C-shaped) constructed by a base (22 in fig. 5A) portion having an opening (corresponding to 22 in fig. 5A) corresponding to an image formation area of the optical modulator body and a pair of lateral portions (50a) vertically provided on opposing sides of the base portion (fig. 5B) and further including an LCD panel (22).

But, Okada et al. fails to explicitly teach having a pair of transparent substrates between which an electro-optic material is sealed.

However, within the same field of endeavor, Fujimori teaches for example in fig. 8B, that it is well known in the art of LCD panels to have a pair of transparent substrates (962 and 963) between which an electro-optic material (925) is sealed.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Okada et al. to teach the LCD panel is a pair of transparent substrates between which an electro-optic material is sealed in order to provide an LCD panel as is well known in the art.

Re claim 3, Fujimori further teaches for example in fig. 9, wherein a dustproof glass (962 and 963) that prevents adhesion of dust is closely attached to a light-incident side or the light-irradiation side of the optical modulator body or a light-incident side and the light-irradiation side of the optical modulator body, the dustproof glass being made of a heat conductive transparent material (col. 13, ln. 21-26).

Re claims 4 and 7, Fujimori further teaches for example in fig. 12A, wherein at least three incident-side dustproof glass positioners (51d) for the dustproof glass on the light-incident side are provided around the opening of the holding frame (965) or at least three irradiation-side dustproof glass positioners (51c) for the dustproof glass on the light-irradiation side are provided around the opening of the holding frame (965).

Re claim 26, Okada et al. further teaches for example in fig. 1A, projector that modulates a light beam irradiated by a light source in accordance with image information and forms an optical image to project the optical image in an enlarged manner (para. 0002).

Allowable Subject Matter

Claims 2, 10-25 and 27 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: the prior art taken alone or in combination fails to anticipate or fairly suggest the limitations of the claims, in such a manner that a rejection under 35 USC 102 or 103 would be proper. The prior art fails to teach a combination of all the claimed features as presented in dependent claims 2, 10 and 13.

Specifically regarding claim 2, the prior art fails to explicitly teach the frame member having a pair of bent portions formed at a position opposing the pair of lateral portions, the lateral portions and the bent portions being abutted and bonded, as claimed.

Specifically regarding claim 10, the prior art fails to explicitly teach a bent rib bent toward the inside of the holding frame is formed on a distal end of the lateral portion of the holding frame, as claimed.

Specifically regarding claim 13, the prior art fails to explicitly teach a base made of heat-conductive material fixed on at least one of sides of the color synthesizing optical device and an optical converter interposed between the optical modulator and the light-incident side, the optical converter having an end attached to the base and an optical conversion film provided on the substrate, as claimed.

Conclusion

Art Unit: 2873

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph P. Martinez whose telephone number is 571-272-2335. The examiner can normally be reached on M-F 7:00 AM to 3:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Y. Epps can be reached on 571-272-2328. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JPM
8-20-04



Hung Xuan Dang
Primary Examiner